The sole inventor of this continuation application is Moshe Finarov. The other three inventors, Eran Dvir, Eli Haimovich, and Benjamin Shulman, have been deleted from this continuation application.

The original Claims 1-16 of Serial No. 08/497,382 have been canceled and new Claims 17-19, directed to the combination of a polishing unit and an optical thickness measuring unit, have been added.

AMENDMENTS TO DRAWINGS AND THE SPECIFICATION

The specification has been amended on page 1, before the first line, to state that this is a continuation application of serial no. 08/497,382, filed June 29, 1995.

Applicants have discovered a typographical error on page 3 and have corrected it in this amendment. The amendments requested to the drawings are for the purpose of conforming the drawings to the specification, and to correct in regard to Figure 8 an obvious reference character number error.

DISCUSSION OF PREVIOUSLY CITED PRIOR ART

As previously discussed, Burke et al. describe a wafer polishing tool which has a separate measuring station and means for moving the wafer to the measuring station. The measuring station performs electrical testing of the wafer through an electrolyte. Lustig et al. show in-situ reflectance measurements of a wafer being polished.

The present invention, on the other hand and as recited in new Claim 17-19, is a polisher which optically measures the thickness of a top layer of a wafer.

Neither Burke et al. nor Lustig et al. show an optical thickness measuring unit. The optical unit of Lustig et al. measures reflectance which is an indication of the shininess, but

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not the thickness, of the top layer of the wafer. The thickness measuring unit of Burke et al. is an electrical measurement. The replacement of the Lustig et al. measuring unit does not provide the unit of Burke et al. with an optical thickness measuring unit.

Unlike prior art optical thickness measuring units, the present invention locates the measurement station within the polisher, but apart from the polishing unit. Because the optical measurement station is separate from the polishing unit, the optical unit does not disturb the polishing operation nor are its optical properties constrained by the presence or operation of the polishing unit. Furthermore, there is no need to dry the wafer after the polishing operation since, in the present invention, the optical measurement occurs while the wafer is wet.

Claim 17 is, therefore, deemed to be allowable. Claims 18-19, which depend from Claim 17 and add additional subject matter thereto are deemed to be allowable for at least the reason of their dependency on Claim 17.

In view of the above mentioned amendments and remarks, it is respectfully submitted that the pending claims are patentable over the art of record and are in condition for allowance. Prompt notice of allowance is respectfully solicited.

Respectfully submitted,

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